IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA AT CHARLESTON

IN RE ETHICON, INC., PELVIC REPAIR SYSTEM PRODUCTS LIABILITY LITIGATION

Master File No. 2:12-MD-02327 MDL 2327

THIS DOCUMENT RELATES TO: ETHICON WAVE 5 CASES

JOSEPH R. GOODWIN U.S. DISTRICT JUDGE

DEFENDANTS' RESPONSE IN OPPOSITION TO PLAINTIFFS' MOTION TO EXCLUDE CERTAIN OPINIONS OF RAGNVALD MJANGER, M.D.

Defendants Ethicon, Inc. and Johnson & Johnson (collectively, "Ethicon") submit this response in opposition to Plaintiff's Motion to Exclude Certain Opinions of Ragnvald Mjanger, M.D. See Doc. 4414 and 4415.

INTRODUCTION

Dr. Mjanger is an obstetrician and gynecologist focusing on treating incontinence, prolapse and other pelvic floor disorders. Doc 4414-3, Ex. C. to Pls.' Motion, Expert Report at 1. He has been board-certified in obstetrics and gynecology since 2000 and Female Pelvic Medicine and Reconstructive Surgery since 2015. *Id.* at 1 and Doc 4414-2, Ex. B to Pls.' Motion, Mjanger CV at 1. Dr. Mjanger is a clinician, in private practice in St. Paul, Minnesota and an Assistant Clinical Professor at the University of Minnesota Medical School. *Id.*

Dr. Mjanger has performed over 10,000 pelvic surgeries including many different types of procedures to treat stress incontinence, including open and laparoscopic retropubic urethropexies, Burch and Marshall-Marchetti-Krantz (MMK) procedures, needle suspensions, fascial bladder neck slings, and synthetic mid-urethral slings. Doc. 4414-3, Pls. Motion, Ex. C, Expert Report at 1. He has also taught other physicians how to perform these procedures. *Id*.

Dr. Mjanger also performs revision procedures. Doc. 4414-4, Pls.' Motion, Ex. D, 7/20/17 Mjanger Dep. at 60:11-21.

In these cases, Dr. Mjanger intends to offer opinions generally addressing the utility and safety of the TVT and TVT-O devices. His opinions are based upon his education, medical training, clinical experience, review of medical literature, position statements, guidelines, curricula, and various other materials reflected in his reliance list. Doc. 4414-3, Pls.' Motion. Ex. C, Expert Report at 1-2; Ex. A hereto, Reliance List. Although Plaintiffs have challenged certain aspects of Dr. Mjanger's opinions, as set forth below, he is qualified to opine on these topics and his opinions are supported by a reliable methodology. Plaintiffs' arguments lack merit and should be denied.

ARGUMENT

Ethicon incorporates by reference the standard of review for *Daubert* motions as articulated by the Court in *Huskey v. Ethicon, Inc.*, 29 F. Supp. 3d 691, 701 (S.D. W. Va. 2014).

I. Dr. Mjanger is qualified to testify regarding the adequacy of the warnings.

Dr. Mjanger has opined on the adequacy of the TVT and TVT-O IFU warnings from a clinical perspective based on his knowledge of and clinical experience with the devices. *E.g.*, Doc. 4414-3, Pls.' Motion. Ex. C, Expert Report at 2, 12-13. Plaintiffs do not challenge, or even address, Dr. Mjanger's clinical expertise. Instead Plaintiffs argue that he is not qualified to opine on the adequacy of the IFUs because he lacks familiarity with the regulatory process governing the development of such documents.

Ethicon concedes that Dr. Mjanger is not a regulatory expert and will not opine on warnings from that perspective. Consistent with the Court's prior rulings as to other urogynecologist expert witnesses [Dr. Flynn], however, Dr. Mjanger, as an Ob/Gyn and female pelvic medicine and reconstructive specialist, "he may testify about the specific risks of

implanting mesh and whether those risks appeared on the relevant IFU." *In re: Ethicon*, 2016 WL 4582231, at *3 (S.D. W. Va. Aug 31, 2016). Dr. Mjanger's report details his experience with the TVT and TVT-O devices, including particular risks and complications he has experienced. Doc. 4414-3, Pls.' Motion. Ex. C, Expert Report at 12-13. His extensive clinical experience with the products at issue is supplemented by a thorough review of the relevant literature, his education and training, including education he has provided to others. *Id.*, Ex. A hereto, Reliance List; Doc. 4414-2, Pls.' Motion Ex. B, Mjanger CV.

Plaintiffs do not appear to challenge Dr. Mjanger's competency to testify that risks that did not appear on the IFUs were already commonly known to clinicians but to the extent that their motion is construed to do so, any such challenge should be denied. Dr. Mjanger will testify that the complications that Plaintiffs allege should have been in the IFUs: (a) are risks that a pelvic surgeon would already know, and therefore, need not be warned about; (b) are not genuine complications; or (c) are not attributable to the device. Doc. 4414-4, Pls.' Motion Ex. D, 7/20/17 Mjanger Dep. at 283-285, 288.

As it relates to the latter two categories, Dr. Mjanger's report shows that his opinions are based on his extensive clinical experience, *as well as* his critique of scientific literature. *See*, *e.g.*, Doc. 4414-3, Pls.' Motion. Ex. C, Expert Report at 8-10. (explaining why he disputes that mesh causes various conditions, such as damage from contraction, cytotoxicity, or degradation); *see also Huskey*, 29 F. Supp. 3d at 734-35 (allowing Dr. Johnson to testify about evidence of

absence because his opinions were also based on medical literature); *Carlson*, 2015 WL 1931311 at *12 (S.D. W. Va. Apr. 28, 2015).¹

Dr. Mjanger, as an experienced clinician, is well qualified to testify about complications that are commonly known such that they need not be included in an IFU. Doc. 4414-3, Pls.' Motion. Ex. C, Expert Report at 12-13. The law imposes no duty to warn sophisticated users of products with respect to risks that the sophisticated users already know or should know. *See*, *e.g.*, Restatement (Third) Tort: Product Liability \$2 cmt. J. (1988); Restatement (Second) of Law of Torts \$402A cmt. J.; American Law of Product Liability 3d \$ 32:69 (2016); *Willis v. Raymark Indus.*, *Inc.*, 905 F.2d 793, 797 (4th Cir. 1990). In fact, 21 CFR \$801.109(c) states there is no duty to warn if "the article is a device for which the hazards, warnings, and other information are commonly known to practitioners licensed by law to use the device. Experts may testify as to the knowledge common within a profession or community. *See Flannery v. Bauermeister*, No. CIV. A. 06-399S, 2008 WL 77723, at *2 (D. R.I. Jan. 4, 2008) (granting summary judgment in part based on testimony from defendants' experts as to what "is known within the correctional medical community")' *Cruz-Vargas v. R.J. Reynolds Tobacco Co.*, 348 F.3d 271, 277 (1st Cir. 2003) (allowing expert testimony of "common knowledge")'; *U.S. v. Articles of Device*, 426 F.

¹ While this Court has observed that '[a]bsence of evidence is not evidence of absence," *Tyree*, 54 F. Supp. 3d 501, 583-84 (S.D. W. Va. 2014), the observation only holds true where a cursory inquiry of the evidence has been made. For instance, if a physician is relying merely on his own experience to opine that a particular risk does not exist, the methodology may be flawed. However, where, as here, a physician examines the evidence outside of his own experience, such as by critiquing the medical literature and studying the conclusions of medical organizations, then the physician's opinions have a reliable basis. If there is no reliable evidence of risk as determined by a detailed review of appropriate sources, there is no obligation to include the risk in the IFU warnings.

Supp. 366 (W.D. Pa. 1977) (FDA offered affidavit in misbranding case). Thus, the TVT and TVT-O IFUs supplement all of the other sources of a surgeon's knowledge.

This is an objective test not dependent on the knowledge of the individual surgeon, and Dr. Mjanger is certainly competent to share his opinions about what risks should be obvious to surgeons who use the devices and how an average clinician would construe the IFUs. Indeed, Ethicon writes its IFUs for pelvic floor surgeons like Dr. Mjanger. Under the learned intermediary doctrine, such surgeons are the ones who must be adequately warned. If Plaintiffs intend to argue at trial that Ethicon's IFU failed to disclose certain risks, then it is only fair that Ethicon be allowed to defend itself by demonstrating that those risks were obvious to the users of the product (pelvic surgeons), and therefore, did not need to be included in the IFUs in accordance with the aforementioned law.

II. Dr. Mjanger is qualified to render opinions regarding the utility and safety of the TVT and TVT-O devices, and his opinions are supported by reliable methodology

Plaintiffs claim that Dr. Mjanger "should be precluded from giving design opinions" on the basis that he has inadequate expertise with the design process and product development.

Doc. 4415, Pls.' Motion at 7. As set forth below, Dr. Mjanger does not intend to provide design process opinions, and he is well qualified to testify about the safety and utility of the devices.

A. Dr. Mjanger will not provide design process opinions

Plaintiffs made this same challenge as part of their motions to exclude other defense expert opinions in Wave 1 cases. Noting that Plaintiffs' motion was "plagued with confusion about what constitutes a design opinion," the Court correctly found that "[Dr. Woods] has not expressed any opinions about the process of designing a product." *In re: Ethicon Inc. Pelvic Repair Sys. Prod. Liab. Litig.*, 2016 WL 4582231, at *3 (S.D. W. Va. Sept. 1, 2016). Therefore, the Court denied Plaintiffs' challenge to the defense experts design opinions "as moot". *Id.*

The Court should make the same finding in this Wave of cases. Dr. Mjanger does not intend to opine about product design and development, and Plaintiff's motion should not be construed as challenging Dr. Mjanger's opinions about the safety and efficacy of TVT or TVT-O.

B. Ethicon's internal product design process documents are irrelevant to Dr. Mjanger's safety and utility opinions.

Relying exclusively on this Court's opinion in *Winebarger v. Boston Scientific Corp.*, 2015 WL 1887222 (S.D. W. Va. Apr. 24, 2015), Plaintiffs argue that because Dr. Mjanger has not reviewed Ethicon's internal documents about its design process, he cannot opine about any issues that touch upon product design. As previously noted by Ethicon, Dr. Mjanger does not intend to offer *any* opinion regarding the adequacy of Ethicon's internal design procedures or Ethicon's compliance with industry standards during the development of the devices. To the extent that Plaintiffs seek to use Dr. Mjanger's failure to review certain design process documents as a basis to exclude his opinions about the safety and efficacy of TVT and/or TVT-O, Plaintiffs' motion lacks merit and should be denied.

This Court's decision in *Winebarger* lends no support to Plaintiffs' argument. In that case, Boston Scientific challenged the opinion of the plaintiff's proposed expert, Dr. Bobby Shull, regarding Boston Scientific's failure to "follow its own internal protocols" and its "lack of due diligence in the design and development" of the product in issue. *Winebarger*, at *14. Dr. Shull, however, did not review any documents related to Boston Scientific's standard operating procedures or its design protocols. *Id.* Consequently, this Court held that "[w]ithout any reliable, demonstrated knowledge of BSC's internal design procedures, Dr. Shull cannot substantiate his opinion that these procedures were (1) departures for the norm; (2) not followed by BSC; or (3) lacking in any way." *Id.*

In contrast to Dr. Shull in *Winebarger*, Dr. Mjanger does not intend to offer any opinions regarding Ethicon's "internal design procedures," and therefore, it was unnecessary for Dr. Mjanger to review any of Ethicon's internal documents related to design procedures. In fact, in *Winebarger*, the Court allowed Dr. Patrick Culligan, a defense expert urogynecologist, to opine about the safety and efficacy of the medical device, even though the Court concluded that Dr. Culligan was not competent to testify about mesh design. *Id.* at *33-35. This Court has found that other physicians with surgical experience were competent to offer opinions similar to that of Dr. Mjanger. *See, e.g., Tyree*, 54 F. Supp. 3d at 550; *Jones v. Bard, Inc.*, No. 2:11-cv-00114 [Doc. 291], pp. 6-9; *Trevino v. Boston Scientific Corp.*, 2016 WL 1718836, at *33 (S.D. W. Va. Apr. 28, 2016).

Plaintiffs have chosen to focus on an opinion Dr. Mjanger has not offered related to documents Dr. Mjanger was not even asked to review. Quite simply, Plaintiffs have not shown and cannot show that a review of Ethicon's internal product design process documents was necessary for any of the opinions that Dr. Mjanger intends to provide in these cases.

C. The complication and satisfaction rates in Dr. Mjanger's practice are consistent with the rates reported in the peer-reviewed medical literature.

Plaintiffs argue that Dr. Mjanger should be precluded from opining on the design of the TVT and TVT-O "being reasonably safe" because he relies "solely on his personal experience using the products and not the design protocols or methodology of a medical device manufacturer." Doc. 4415, Pls. Motion at 9-10. Ethicon acknowledges that, in its Wave 1 rulings, the Court excluded expert witness opinions regarding complication rates in an expert's own practice on the basis that "his complication rates derive entirely from mental estimates and not from accumulated data or patient records." *In re: Ethicon*, 2016 WL 4582231, at *3. Ethicon respectfully suggests that Dr. Mjanger's opinions about these rates in his own practice

are sufficiently reliable and that the Court allow Dr. Mjanger to testify about such rates consistent with other decisions issued by the Court. *See Bellew v. Ethicon, Inc.*, No. 2:13-cv-22473, Doc. 265, p. 40 (S. D. W. Va. Nov. 20, 2014) ("If *Daubert* required an expert witness to independently verify every single clinical experience he had over the course of his career, the court would never make it past pre-trial motions"); *Winebarger v. Boston Scientific Corp.*, 2015 WL 1887222, at *34 (S.D. W. Va. Apr. 24, 2015) (finding that expert's inability to provide "exact statistics" about the outcome of his patients did not render his personal experience opinions unreliable and that "such detail is not required under *Daubert* to opine as to '*large-scale*' safety and efficacy of the Uphold device"); *Trevino v. Boston Scientific Corp.*, 2016 WL 1718836, at *33 (S.D. W. Va. Apr. 28, 2016) (same).

Alternatively, the Court, as it did in its Wave 1 rulings, should limit its exclusion of Dr. Mjanger's opinions to his statements about his own patient's outcomes. To the extent that Plaintiff's motion could be construed as challenging Dr. Mjanger's ability to provide opinions about the safety and efficacy of TVT and TVT-O beyond his own personal experience, it should be denied.

Indeed, Dr. Mjanger's extensive personal experience, coupled with his reliance on medical literature, make him well-qualified to opine about the safety and utility of the devices. Dr. Mjanger is a skilled female pelvic floor surgeon with over 25 years of experience treating stress urinary incontinence and female pelvic floor disorders, as well as the complications resulting from the implantation of transvaginal mesh. Doc. 4414-3, Pls.' Motion. Ex. C, Expert Report at 1. He has implanted thousands of TVT and TVT-O devices and regularly treats patients for complications related to pelvic surgery. *Id.*; Doc. 4414-2, Pls.' Motion Ex. B, Mjanger CV.

As reflected in his report, and supported by published studies, the rate of mesh exposure for TVT ranges on average from 1- 3% in the peer reviewed literature. E Doc. 4414-3, Pls.' Motion. Ex. C, Expert Report at 6-8; Doc. 4414-4, Pls.' Motion Ex. D, 7/20/17 Mjanger Dep. at 279-282. Dr. Mjanger believes his personal success and complication rates to be generally consistent with the peer-reviewed scientific literature. Doc. 4414-4, Pls. Motion Ex. D, 7/20/17 Mjanger Dep. at 279-282.

III. Dr. Mjanger is competent to testify about degradation.

As this Court concluded in its rulings in Wave 1 as to Plaintiff's argument that another expert witness [Dr. Flynn] was not competent to testify about degradation was "without merit." *In re: Ethicon*, 2016 WL 4556807, at *4 (S.D. W. Va. Aug. 31, 2016). The Court held that Dr. Flynn's "extensive clinical experience, combined with [his] review of the scientific literature, qualifies [him] to opine on mesh's reaction to and effect on the human body." *Id*. The same analysis should apply to Dr. Mjanger.

Dr. Mjanger's opinions are particularly bolstered by his review of Level 1 long-term studies, RCTs, systematic reviews, meta-analyses, and Cochrane reviews demonstrating the safety of polypropylene mesh and that the mesh is not degrading. *See, e.g.*, E Doc. 4414-3, Pls.' Motion. Ex. C, Expert Report at 6-10; Doc. 4414-4, Pl's Motion Ex. D, 7/20/17 Mjanger Dep. at 289-290. As stated in Dr. Mjanger's report, "Clinical evidence, including my own clinical experience, established that TVT mesh does not degrade in vivo. If it does, any such degradation does not (find any possible testimony that would work here about his personal experience and any literature testimony). Doc. 4414-3, Pls.' Motion. Ex. C, Expert Report at 9.

Plaintiffs fault Dr. Mjanger for not reviewing the devices' design history files, but Dr. Mjanger does not offer opinions about Ethicon's process of developing products. Indeed,

Dr. Mjanger's opinions about degradation are not at the molecular level and the equivalent of the opinions of a polymer scientist, but instead, are focused on clinical aspects of alleged degradation. *See Wilkerson*, 2015 WL 2087048, at *20 (S.D. W. Va. May 5, 2015). ("That he [Dr. Porter] has no experience in polymer science is irrelevant because Dr. Porter is not offering opinions about 'what's happening at the molecular level").

Plaintiffs also argue that Dr. Mjanger should not be allowed to testify about the lack of any meaningful clinical effects of degradation, because he "does not hold himself out as an expert in chemical engineering, pathology, or polymer chemistry."; "has not done any bench or lab research on polypropylene or polypropylene meshes"; "has never performed any kind of pathological analysis on any explanted polypropylene meshes and . . . is not a biomaterials specialist." Pl's Motion at 11. In *Huskey*, this Court rejected a similar challenge to defense expert urogynecologist, Harry Johnson, M.D. 29 F. Supp. 3d at 735. Noting that although "Dr. Johnson's opinion is not subject to testing and it is not supported by peer-reviewed literature *affirmatively* stating that degradation lacks clinical significance," Dr. Johnson's "clinical experience and his review of the scientific literature" set forth a sufficient basis for his opinion and "Dr. Johnson's failure to review particular documents goes to the weight of his opinion, not its admissibility." *Id.* Again, "[i]f there are certain device-specific publications that [Plaintiffs claim that Dr. Flynn] failed to review in preparing his expert report, the plaintiff is free to ask him about those publications on cross-examination." *Trevino*, 2016 WL 2939521, at *41.

IV. Dr. Mjanger's opinions regarding safety and efficacy of the TVT and TVT-O are based in sound methodology.

Dr. Mjanger has applied a sound methodology in formulating his opinions regarding the safety and efficacy of TVT and TVT-O and the rates referenced in his testimony are supported by his thorough review of peer-reviewed publications demonstrating the long-term safety of the

devices, as well as the repeated endorsement of medical societies. Doc. 4414-4, Pls.' Motion Ex. D, 7/20/17 Mjanger Dep. at 279-282. His opinions are also supported by his decades of clinical experience and medical training. Although Dr. Mjanger could not verify precise percentages for specific types of complications realized in his practice, that failure does not impact his ability to testify about the safety and efficacy of TVT and TVT-O, as demonstrated by the scientific literature that he has reviewed.

This Court has recognized that a physician may testify that complication rates found in literature are verified by his personal experience. See, e.g., Tyree v. Boston Scientific Corp., 54 F. Supp. 3d 501, 585 (S.D. W. Va. 2014) (expert applied reliable methodology supporting opinion that product was safe and effective where opinion was based upon "minimal complications in his clinical practice" which was "on par with the findings of [the] studies' he cites throughout his expert report"); Carlson v. Boston Scientific Corp., 2015 WL 1931311, at *12, *36 (S.D. W. Va. Apr. 28, 2015) (finding Dr. Galloway's method of considering scientific articles and drawing on his clinical experience to reach his opinion regarding degradation to be methodologically sound and allowing Dr. Culligan "by way of his experience with the Uphold device and his review of the relevant scientific literature" to opine how these procedures compare.) That is precisely what Dr. Mjanger will do in these cases. Any alleged inconsistencies or weaknesses in Dr. Mjanger's testimony go to its weight, not its admissibility. See Daubert, 509 U.S. 579, 596 (1993) ("Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attaching shaky but admissible evidence.")

CONCLUSION

For the foregoing reasons, Defendants respectfully request that the Court deny Plaintiffs' motion to exclude Dr. Mjanger's testimony.

Dated: August 29, 2017. Respectfully submitted,

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COUNSEL FOR DEFENDANTS ETHICON, INC. AND JOHNSON & JOHNSON CERTIFICATE OF SERVICE

I hereby certify that on August 29, 2017 I electronically filed the foregoing document with

the Clerk of the Court using the CM/ECF system which will send notification of such filing to

CM/ECF participants registered to receive service in this MDL.

/s/ Tracy J. Van Steenburgh

Tracy J. Van Steenburgh

EXHIBIT A

Ragnvald Mjanger

Reliance List in Addition to Materials Referenced in Report

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Production Materials

Document Description [Bates Range]

A Solution-Gynecare TVT Tension-Free Support for Incontinence.

DEPO.ETH.MESH.00004755 - Guidoin Explant

DX23600-R.1-3 - Prolene Resin Manufacturing Specifications 1.23.03

Email string re - Revised write up of the DeLeval and Waltregny visit

ETH.MESH.00071794 - Email re: TVT IFUs on tape extrusion, exposure and erosion

ETH.MESH.00220335-36 - 12.2.1999 Memo re: Biocompatibility Risk Assessment for Soft Prolene Mesh.

ETH.MESH.00262015-016 - Dan Smith Email Plaintiffs Exhibit 2067

ETH.MESH.00349228 - Cytotoxicity Risk Assessment for the TVT (Ulmsten) Device

ETH.MESH.00373310 - Gynecare TVT Tension-Free Support for Incontinence: General Profession Education Deck.

ETH.MESH.00523942 - Waltregny 2005 ICS Presentation

ETH.MESH.00526473-74 - Allison Brown Email re-Laser-cut Mesh

ETH.MESH.00541379-80 - Mesh Fraying for TVT Devices

ETH.MESH.00575257 - Abbrevo laser cut vs. mechanically cut - notes from meeting with de leval - inappropriate

ETH.MESH.00575270-273 - Jean de Leval Email Re: DSCN3332.JPG May 30, 2009

ETH.MESH.00584811-13 - Email string re-Ultrasonic Slitting of Prolene Mesh for TVT

ETH.MESH.00590896-897 - Piet Hinoul Email 3.11.09

ETH.MESH.00658177-198 - Surgeons Resource Monograph

ETH.MESH.00687819-22 - Email string re-Laser cut mesh

ETH.MESH.00857821 - Top Ten Reason to pursue Gynecare TVT Obturator System

ETH.MESH.00858080-081 - Perry Trial - Plaintiff's Exhibit 2313

ETH.MESH.00858096-97 - Gynecare R&D Monthly Update - May

ETH.MESH.00858175-176 - Mulberry Weekly Meeting MINUTES for 6.3.03

ETH.MESH.00858252-53 - 2004 Memo from London Brown to Dan Smith re Mechanical Cut vs. Laser Cut Mesh Rationale

ETH.MESH.00863391 - T-366 - Dan Smith email - particle loss

ETH.MESH.00870466 - Ethicon Expert Meeting-Meshes for Pelvic floor

ETH.MESH.00993273 - TVT Obturator Anatomic Considerations Clinical Update: Special Considerations, Complications.

ETH.MESH.01202189 - Stale Kvitle Email regarding Mini Me follow up from our visit May 20, 2009

ETH.MESH.01202190-191 - David Waltregny Email Re: Mini Me follow up from our visit May 21, 2009

ETH.MESH.01203957-97 - The future of surgical meshes-the industry's perspective

ETH.MESH.01219542-48 - Review of Surgeon Responses of VOC Questionnaire

ETH.MESH.01220135-45 - Email string re-New Standards for Urethral Slings

ETH.MESH.01228079-84 - Nilsson Podcast Transcript

ETH.MESH.01238454-56 - Email string re-TVTO length

ETH.MESH.01279975-976 - Harel Gadot Email re Next step in SUI sling

ETH.MESH.01317508-613 - TVT Factbook DHF - Revised 05.14.2001

ETH.MESH.01752532-35 - Mesh design argumentation issues

ETH.MESH.01784823-28 - Clinical Expert report-Laser Cut Mesh

ETH.MESH.01785259-260 - Email string re: +M relaxation

ETH.MESH.01808311-318 - Trip Report Michael Tracey

ETH.MESH.01809082-83 - Memo re: VOC on new laser cut TVT mesh

ETH.MESH.01813259; ETH.MESH.02180759-61 - Email string with attachment re-Jeans Ideas.

ETH.MESH.01813975-78 - Email string re-FDA Prep-Plaintiff's Exhibit 460

Production Materials

ETH.MESH.01822361-363 - Dan Smith Email regarding TVT Secur October 18, 2006 ETH.MESH.01822361-62 - Dan Smith Email regarding TVT-Secur leading to less retention ETH.MESH.02017152-56 - 02.23.2007 Ethicon Expert Meeting: Meshes for Pelvic Floor Repair ETH.MESH.02026591-95 - MSDS-c4001 Polypropylene Homopolymer ETH.MESH.02090196-209 - Plaintiff's Exhibit 4085-04.15.2008 ETH.MESH.02211890 - Test Report ETH.MESH.02319312 - Memo re-TVT-base & TVT-O Complaint Review for Laser Cut Mesh Risk Analysis ETH.MESH.02340331-335 - TVT IFU (12.22.03 to 02.11.05) ETH.MESH.02340568-90 - TVT-S IFU ETH.MESH.02340829-835 - TVT-O IFU - (01.07.04 to 03.04.05) ETH.MESH.02341203-13 - TVT Abbrevo IFU ETH.MESH.03259439-40 - 4.24.2009 Gauld email chain re Green Journal ETH.MESH.03427878-883 - TVT IFU - (11.29.10 to11.26.14) ETH.MESH.03458123-38 - TVT Patient Brochure ETH.MESH.03715978 - Weisberg email re: TVT question. ETH.MESH.03905472-77 - Email string re-TVT recommendation from Dr. Alex Wang ETH.MESH.03907468-9 - Second Generation TVT - by Axel Arnaud ETH.MESH.03910175 - Email string re - Soft Prolene ETH.MESH.03910418-21 - Email string re-Mini TVT - mesh adjustment ETH.MESH.03911107-08 - Email string re-TVT complications (an Prof. Hausler) ETH.MESH.03913357-359 - Axel Arnaud Email 5.31.07 Re TVT TVT-O ETH.MESH.03916905-13 - Plaintiff's Exhibit 3827 ETH.MESH.03924557-86 - Meshes in Pelvic Floor Repair-Findings from literature review and conversationsinterviews with surgeons, June 6, 2000. ETH.MESH.03930120-123 - Nilsson C. Seven-Year Follow-up of the Tension-Free Vaginal Tape Procedure for Treatment of Urinary Incontinence. Obstet Gynecol 2004; 104(6): 1259-62 ETH.MESH.03932909-911 - Confidential - History of TVT-O ETH.MESH.03932912 - The History of TVT ETH.MESH.03941623 - DeLeval Email RE: TVT ABBREVO ALERT - French and English Email and English Translation Certification Plaintiff's Exhibit 3619- Perry ETH.MESH.04048515-520 - Carl Nilsson KOL Interview Project Scion 06.18.08 ETH.MESH.04081189 - Meeting Agenda ETH.MESH.04082973 - Possible Complications for Surgeries to Correct POP and SUI ETH.MESH.04092868 - Email re: 10100080654 and TVT IFUs ETH.MESH.04938298-299 - Piet Hinoul Email Re: Prof. de Leval - TVT Abbrevo ETH.MESH.04941016 - Lightweight Mesh Developments (Powerpoint) ETH.MESH.04945231-239 - Email string re-Ultrapro vs Prolene Soft Mesh ETH.MESH.04945496 - Bernd Klosterhalfen Email Re: Ultrapro vs. Prolene Soft Mesh April 18, 2005 ETH.MESH.05225380-384 - TVT IFU - (09.08.00 to 11.26.03) ETH.MESH.05337217-220 - Email string, top one from D. Miller to J. Paradise, et al ETH.MESH.05347751-762 - Email string re Investigator-initiated studied policy ETH.MESH.05479411 - The (clinical) argument of lightweight mesh in abdominal surgery ETH.MESH.05479535 ETH.MESH.05588123-126 - Stephen Wohlert Email - AW: How inert is polypropylene? July 9, 2007 ETH.MESH.05644163-171 - Pelvic Floor Repair-Surgeon's Feed-back on Mesh Concept ETH.MESH.05799233-39 - TVT Exact IFU ETH.MESH.05918776 - Email re: Marlex Experience

Production Materials ETH.MESH.05958248 - Surgeons Resource Monograph ETH.MESH.05998835-836 - Piet Hinoul Email Re: ALERTE TVT ABBREVO ETH.MESH.06592243 - 09.14.2012 Email from Carl Nilsson to Laura Angelini ETH.MESH.06695438 - Justification for Utilizing the Elasticity Test as the Elongation Requirements on TVT LCM ETH.MESH.06887138-40 - Waltregny email written on behalf of Professor de Leval. ETH.MESH.06887244 - 07.16.04 David Waltregny email to Dan Smith re: TVT-O. ETH.MESH.06917699-704 - Form For Customer Requirements Specification (CRS) For Project TVT-O PA ETH.MESH.06923868-71 - TVTO-PA Clinical Strategy - 8.21.13 Exhibit A.M. Mitchell T-2177 ETH.MESH.07192929 - Investigating Mesh Erosion in Pelvic Floor Repair Powerpoint ETH.MESH.07226579-590 - 2000 - TVT CER ETH.MESH.07383730-31 - Email string re-Ultrapro mesh information-identical mesh to Prolift +M ETH.MESH.08003181-96 - TVT Patient Brochure ETH.MESH.08003231-46 - TVT Patient Brochure ETH.MESH.08003279-94 - TVT Patient Brochure ETH.MESH.08003295-302 - TVT Patient Brochure ETH.MESH.08299913-917 - Nilsson C. Seventeen years' follow-up of the tension-free vaginal tape procedure for female stress urinary incontinence. Int Urogynecol J 2013; 24(8): 1265-9 [9.11.13 Exhibit T-1271] ETH.MESH.08315779 - Clinical Expert report-09.25.2012 ETH.MESH.08334244; ETH.MESH.08334245 - Email re Photographs of LCM vs MCM with attachments ETH.MESH.08334244-45 - Email string re-Photographs of LCM vs MCM with powerpoint attachment ETH.MESH.09264945-46 - Prolene Mesh Re-Design Project ETH.MESH.09630649 - 4.26.1973 FDA Letter RE: NDA 16-374 ETH.MESH.09656792 ETH.MESH.09656795 ETH.MESH.09744858-63 - TVT Patient Brochure ETH.MESH.09746948-998 - License and Supply Agreement [Rosenzweig Exhibit 21 - 12.22.15] ETH.MESH.09747038-097 - Medscand Agreement ETH.MESH.09747337-369 - Asset Purchase Agreement ETH.MESH.09888187-223 - Seven Year Data for Ten Year Prolene Study - Plaintiff's Exhibit 4102 ETH.MESH.09922570-578 - R&D Memorandum of PA Mesh Assessments for TVTO-PA Revision 1 ETH.MESH.10281860 - Tension-Free Midurethral Sling: Market Update. ETH.MESH.11336474-87 - Ten Year In Vivo Suture Study Scanning Electron Microscopy-5 Year Report - Plaintiff's Exhibit 4111 ETH.MESH.12831391-92 - P4128 - IR Microscopy of Explanted Prolene received from Prof. R. Guidoin. ETH.MESH-08476311 - Cytotoxicity assessment of Ulstem sling **Gynecology Solutions** Johnson & Johnson - Our Credo [8.9.13 A.M. Mitchell Exhibit T-3134] June, 2009 Klosterhalfen intermediate report on explanted mesh (highlighted) Klinge Presentation PVDF: a new alternative? Meeting o Hernia Experts Exhibit P-1944 Librojo updated TVT Declaration (10-23-15) [12 pages] McCabe email re - Sheath Sales Tool - 464 **MSDS-Marlex Polypropylenes** P4122 - SEM Figure 183: Sample J7959 13409 (Photographs) Payments to Medscand [9.16.13 Exhibit T-3192]

Payments to Medscand by J&J [9.16.13 Exhibit T-3183]
Payments to Ulmsten as Consultant [9.16.13 Exhibit T-3204]

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Production Materials

Published clinical data and RCTs - Ethicon.com - 4204-C	
Seven Year Dog Study - T-2263	
TVT Abbrevo IFU - 01.2015	
TVT Exact IFU - 01.2015	
TVT IFU - 01.2015	
TVT Patient Brochure - 2015	
TVT-O la bandelette trans-obturatrice (Photograph)	
TVT-Obturator IFU - 01.2015	

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Company Witness Depositions

Deponent [Date of Deposition]	
Hinoul, Piet - 04.05.2012 Deposition Testimony	
Hinoul, Piet - 09.18.2012 Deposition Testimony	
Weisberg, Martin - 05.24.2012 Deposition Testimony	
Weisberg, Martin - 8.9.2013 Deposition Testimony	
Weisberg, Martin - 11.12.2015 Deposition Testimony	
Weisberg, Martin - 11.13.2015 Deposition Testimony	
Nager, Charles - 06.10.2014 Deposition Testimony	

Other Materials

Publically Available

24 Hour Summary of the Gastroenterology and Urology Devices Panel of the Medical Devices Advisory Committee Meeting [02.26.2016].

FDA - Device Labeling Guidance #G91-1 March 1991

FDA Considerations about Surgical Mesh for SUI [03.27.2013].

FDA Executive Summary: Surgical mesh for treatment of women with POP and SUI [09.08.2011]

FDA News Release: Surgical Placement of mesh to repair pelvic organ prolapse poses risk [07.13.2011].

FDA Public Health Notification: Serious Complications Associated with Transvaginal Placement of Surigical Mesh in Repair of POP and SUI. Issued: 10.20.2008.

FDA Questions: Reclassification of the Urogynecologic Surgical Mesh Instrumentation.

Device Labeling Guidance

Deposition Subject Matter-Design and Development of Mesh Products

Oxford Levels of Evidence;

www.cebi.ox.ac.uk/fileadmin/ processed /csm Evidence pyramid bluef5c85529a0.jpg

AUA Guideline for the Surgical Management of Female Stress Urinary Incontinence Update (2009)

ACOG, AUGS Practice Bulletin Summary of 155 (replaces 63 from 2005) Urinary Incontinence in Women.

November 2015.

AUGS SUFU Position Statement on MUS for SUI

AUGS SUFU Frequently Asked Questions by Patients MUS for SUI

AUGS SUFU Frequently Asked Questions by Providers MUS for SUI

AUGS Position Statement on Restrictions of Surgical Options for Pelvic Floor Disorders

AUA (2011) - Position Statement on the Use of Vaginal Mesh for SUI

FDA Considerations about Surgical Mesh for SUI

IUGA Position Statement on MUS for SUI (2014)

IUGA Mid-urethral sling (MUS) procedures for stress incontinence (2011)

2013 Sept. NICE 171 Guideline - The management of urinary incontinence in women

ICS Fact Sheet 2015

RANZOG and UGSA 2014 Position Statement

2012 ABOG - Guide to Learning in Female Pelvic Medicine and Reconstructive Surgery

AUA National Medical Student Curriculum Urinary Incontinence

AUGS Resident Learning Objectives

ACGME Program Requirements.

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Betty McCumber - Case Specific

Depositions	
McCumber, Betty - 4.11.2017	
incomber, betty - 4.11.2017	
Expert Reports	
Other	
Medical Records	
Adena Health Systems - Billing 1-7	
Adena Medical Group - Billing 1-9	
Adena Regional Medical Center - Pathology 1-2	
Adena Regional Medical Center - Radiology 1-1	
Adena Regional Medical Center - Radiology 2-2	
Adena Urology - Billing 1-7	
Adena Urology - Billing 8-16	
Adena Urology - Medical 1-5	
Adena Urology - Medical 17-17 (cert)	—
Adena Urology - Medical 6-6 (cert)	
Adena Urology - Medical 7-16	
Baker Joyce LPC - Medical 1-1 NRS	
Centers for Medicare & Medicaid - Insurance NR cert or letter 1-1	
Centers for Medicare & Medicaid - Insurance NR cert or letter 1-1 Centers for Medicare & Medicaid - Insurance NR cert or letter 2-3	
Haller Maria D DO - Medical 1-2 NRS	
Holzer Clinic - Medical 1080-1101	
Holzer Clinic - Medical 1-256	
Holzer Clinic - Medical 251-515	
Holzer Clinic - Medical 516-1079	
Holzer Medical - Billing 10-14	
Holzer Medical - Billing 1-9	
Holzer Medical Center - Billing 15-16	
Holzer Medical Center - Medical 137-191	
Holzer Medical Center - Medical 1-93	
Holzer Medical Center - Medical 94-136	
Holzer Medical Center - Medical cert 192-192	
Holzer Medical Center - Pathology 1-1 NRS	
Holzer Medical Center - Radiology 1-24	
Holzer Medical Center - Radiology 25-27	
Kincaid Stephen Craig Dr - Medical 1-134	
Kings Daughters Family Care - Medical 1-31	
Kings Daughters Family Care - Medical 132-132	
Kings Daughters Family Care - Medical 133-719	
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Betty McCumber - Case Specific

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Kings Daughters Family Care - Medical 32-90
Kings Daughters Family Care - Medical 720-769
Kings Daughters Family Care - Medical 770-844
Kings Daughters Family Care - Medical 91-131
Kings Daughters Family Care Centers - Billing 845-874
Nooranissa J Pasha MD - Medical 1-1 NRS
Ohio Health Heart And Vascular Physicians - Medical 1-1
Ohio Health Physician Group - Billing 1-1
Plaintiff Profile Form 1-5
Plaintiff Profile Form 6-10
Plaintiff Supplied Records - 198-294
Plaintiff Supplied Records 100-197
Plaintiff Supplied Records 1-1
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Shriver Family Practice - Medical 1-17
Shriver Family Practice - Medical 18-18 CER
Shriver Family Practice - Medical 19-19 CER
Southern Ohio Medical Center - Billing 1-1 NRS
Southern Ohio Medical Center - Medical NR cert or letter 1-1
Southern Ohio Medical Center - Pathology 1-1 NRS
Southern Ohio Medical Center - Radiology 1-1
SSA Retirement and Disability - 1-290
SSA Retirement and Disability - 291-592